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(54) Title: POLYPEPTIDE VARIANTS WITH ALTERED EFFECTOR FUNCTION

(57) Abstract: The present invention concerns polypeptides comprising a variant Fc region. More particularly, the present invention concerns Fc region-containing polypeptides that have altered effector function as a consequence of one or more amino acid modifications in the Fc region thereof.

INTERNATIONAL SEARCH REPORT

Int'l Application No

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A. CLASSIFICATION OF SUBJECT MATTER					
IPC 7	C07K16/00	A61K39/395	C12N15/13	C12N15/85	C12N5/10
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 624 821 A (WINTER GREGORY P ET AL) 29 April 1997 (1997-04-29) column 1, line 44 -column 2, line 61 column 5, line 53-65 column 6, line 38-42 claims --- -/-	1-49

Further documents are listed in the continuation of box C

Patent family members are listed in annex.

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- "P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"S" document member of the same patent family

Date of the actual completion of the international search

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Covone, M

INTERNATIONAL SEARCH REPORT

Int: :tional Application No

PCT/US 00/00973

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	<p>SARMAY G ET AL: "MAPPING AND COMPARISON OF THE INTERACTION SITES ON THE FC REGION OF IgG RESPONSIBLE FOR TRIGGERING ANTIBODY DEPENDENT CELLULAR CYTOTOXICITY ADCC THROUGH DIFFERENT TYPES OF HUMAN FC-GAMMA RECEPTOR"</p> <p>MOLECULAR IMMUNOLOGY, vol. 29, no. 5, 1992, pages 633-639, XP000915240</p> <p>ISSN: 0161-5890</p> <p>abstract</p> <p>figure 3</p> <p>page 634, right-hand column, paragraphs 3,4</p> <p>page 637, left-hand column, line 15-18</p> <p>page 638, left-hand column, paragraph 4</p> <p>-right-hand column, paragraph 2</p> <p>---</p>	1-4, 8-10, 38-42, 44-49
X	<p>WO 98 23289 A (GEN HOSPITAL CORP ;UNIV BRANDEIS (US)) 4 June 1998 (1998-06-04)</p> <p>claims 1-8</p> <p>example 2</p> <p>---</p>	1-4, 8-15, 31-46
X	<p>GHETIE VICTOR ET AL: "Increasing the serum persistence of an IgG fragment by random mutagenesis."</p> <p>NATURE BIOTECHNOLOGY, vol. 15, no. 7, 1997, pages 637-640, XP000876642</p> <p>ISSN: 1087-0156</p> <p>abstract</p> <p>page 637, left-hand column, paragraph 3</p> <p>page 638, left-hand column, paragraph 1</p> <p>page 639, right-hand column, paragraph 5</p> <p>figure 2; table 1</p> <p>---</p>	1-4, 8-15, 31-46
X	<p>MEDESAN CORNELIU ET AL: "Comparative studies of rat IgG to further delineate the Fc:FcRn interaction site."</p> <p>EUROPEAN JOURNAL OF IMMUNOLOGY, vol. 28, no. 7, July 1998 (1998-07), pages 2092-2100, XP000915239</p> <p>ISSN: 0014-2980</p> <p>abstract</p> <p>page 2095, right-hand column, paragraph 2</p> <p>-page 2096, left-hand column, paragraph 1</p> <p>page 2096, right-hand column, paragraph 2</p> <p>-page 2097, column 2</p> <p>page 2098, right-hand column, paragraph 3</p> <p>page 2098, right-hand column, paragraph 2</p> <p>page 3</p> <p>---</p> <p>-/-</p>	1-4, 8-15, 31-46

INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; 16 December 1997 (1997-12-16) HENRY ALISTAIR J ET AL: "Participation of the N-terminal region of Cepsilon3 in the binding of human IgE to its high-affinity receptor FepsilonRI." Database accession no. PREV199800070240 XP002142066 abstract & BIOCHEMISTRY, vol. 36, no. 50, 16 December 1997 (1997-12-16), pages 15568-15578. ISSN: 0006-2960</p> <p>---</p> <p>WO 99 51642 A (GENENTECH INC) 14 October 1999 (1999-10-14) claims; examples 1-3</p> <p>-----</p>	1,2
P,X		1-49

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Information on patent family members

International Application No

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